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FAIRCHILD SEMICONDUCTOR®

Jameco Part Number 36185

Zeners
1N4728A - 1N4752A

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

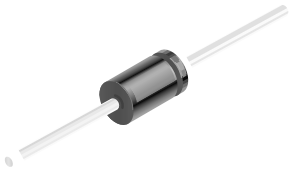
Symbol	Parameter	Value	Units
P_D	Power Dissipation Derate above 50°C	1.0 6.67	W mW/°C
T_{STG}	Storage Temperature Range	-65 to +200	°C
T_J	Operating Junction Temperature	+ 200	°C
$R_{\theta JL}$	Thermal resistance Junction to Lead	53.5	°C/W
$R_{\theta JA}$	Thermal resistance Junction to Ambient	100	°C/W
	Lead Temperature (1/16" from case for 10 seconds)	+ 230	°C
	Surge Power**	10	W

*These ratings are limiting values above which the serviceability of the diode may be impaired.

**Non-recurrent square wave PW = 8.3 ms, TA = 55 degrees C.

NOTES:
1) These ratings are based on a maximum junction temperature of 200 degrees C.
2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Tolerance: A = 5%



DO-41

COLOR BAND DENOTES CATHODE

Electrical Characteristics

T_A = 25°C unless otherwise noted

Device	V_Z (V)	Z_Z @ I_{ZT} (Ω) @ (mA)	Z_{ZK} @ I_{ZK} (Ω) @ (mA)	V_R @ I_R (V) @ (µA)	I_{SURGE} (mA)	I_{ZM} (mA)
1N4728A	3.3	10 @ 76	400 @ 1.0	1.0 @ 100	1380	276
1N4729A	3.6	10 @ 69	400 @ 1.0	1.0 @ 100	1260	252
1N4730A	3.9	9.0 @ 64	400 @ 1.0	1.0 @ 50	1190	234
1N4731A	4.3	9.0 @ 58	400 @ 1.0	1.0 @ 10	1070	217
1N4732A	4.7	8.0 @ 53	500 @ 1.0	1.0 @ 10	970	193
1N4733A	5.1	7.0 @ 49	550 @ 1.0	1.0 @ 10	890	178
1N4734A	5.6	5.0 @ 45	600 @ 1.0	2.0 @ 10	810	162
1N4735A	6.2	2.0 @ 41	700 @ 1.0	3.0 @ 10	730	146
1N4736A	6.8	3.5 @ 37	700 @ 1.0	4.0 @ 10	660	133
1N4737A	7.5	4.0 @ 34	700 @ 0.5	5.0 @ 10	605	121
1N4738A	8.2	4.5 @ 31	700 @ 0.5	6.0 @ 10	550	110
1N4739A	9.1	5.0 @ 28	700 @ 0.5	7.0 @ 10	500	100
1N4740A	10	7.0 @ 25	700 @ 0.25	7.6 @ 10	454	91
1N4741A	11	8.0 @ 23	700 @ 0.25	8.4 @ 5.0	414	83
1N4742A	12	9.0 @ 21	700 @ 0.25	9.1 @ 5.0	380	76
1N4743A	13	10 @ 19	700 @ 0.25	9.9 @ 5.0	344	69
1N4744A	15	14 @ 17	700 @ 0.25	11.4 @ 5.0	304	61
1N4745A	16	16 @ 15.5	700 @ 0.25	12.2 @ 5.0	285	57
1N4746A	18	20 @ 14	750 @ 0.25	13.7 @ 5.0	250	50
1N4747A	20	22 @ 12.5	750 @ 0.25	15.2 @ 5.0	225	45
1N4748A	22	23 @ 11.5	750 @ 0.25	16.7 @ 5.0	205	41
1N4749A	24	25 @ 10.5	750 @ 0.25	18.2 @ 5.0	190	38
1N4750A	27	35 @ 9.5	750 @ 0.25	20.6 @ 5.0	170	34
1N4751A	30	40 @ 8.5	1000 @ 0.25	22.8 @ 5.0	150	30
1N4752A	33	45 @ 7.5	1000 @ 0.25	25.1 @ 5.0	135	27

V_F Forward Voltage = 1.2 V Maximum @ I_F = 200 mA for all 1N4700 series

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